



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

**COMMISSIONER'S OFFICE**  
SUITE 700, JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-1402  
(615) 741-2848

**PAUL DEGGES**  
INTERIM COMMISSIONER

**BILL LEE**  
GOVERNOR

TO: Will Reid, Assistant Chief Engineer of Operations

FROM:  Brad Freeze, Director of Traffic Operations

SUBJECT: **Proprietary Item Request and Justification  
City of Brentwood**

- 1) Traffic Signal Controllers**
- 2) Traffic Signal Conflict Monitors**
- 3) Video Detection System Units**
- 4) Battery Backup System Units**

- 1) **Traffic Signal Controllers:** The City of Brentwood is requesting that Econolite controllers be used in all signalization projects within the City over the next three years where Federal and/or State funding are used. The following are justification items for this request:

The City of Brentwood maintains 50 signalized intersections and has an inventory of existing equipment that is comprised entirely of Econolite controllers which are summarized as follows:

- 42 Econolite ASC3 Controllers
- 8 Econolite Cobalt Controllers

The Econolite controller is required to provide full synchronization including extended function and extended capabilities. The City of Brentwood staff has been extensively trained to install, operate, maintain, program, and troubleshoot Econolite controllers. These products reduce the time required to maintain the system overall and help keep the system operational during heavy traffic times to ensure maximum capacity of this synchronized system. By utilizing this equipment as the standard for the City, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repairs for the future overall.

- 2) **Traffic Signal Conflict Monitors:** The City of Brentwood is requesting that Reno Malfunction Management Units (MMU) be used in all signalization projects within the City over the next three years where Federal and/or State funding are used. The following are justification items for this request:

The City of Brentwood has an inventory of existing equipment that is comprised entirely of Reno MMUs which is summarized as follows:

- 50 Reno 1600GE Malfunction Management Units (MMU)

The Reno MMU is required to provide full synchronization including extended function and extended capabilities. The City of Brentwood staff has been extensively trained to

install, operate, maintain, and troubleshoot Reno MMUs. These products reduce the time required to maintain the system overall and help keep the system operational during heavy traffic times to ensure maximum capacity of this synchronized system. By utilizing this equipment as the standard for the City, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repairs for the future overall.

- 3) **Video Detection System Units:** The City of Brentwood is requesting that Econolite Encore and Vision video detection system units be used in all signalization projects within the City over the next three years where Federal and/or State funding are used. The following are justification items for this request:

The City of Brentwood has an inventory of existing equipment is comprised primarily of the Econolite Encore and Vision video detection system unit which is summarized as follows:

- 21 Econolite Encore and Vision Video Detection System Units

The Econolite Encore and Vision video detection system unit is required to provide full synchronization including extended function and capabilities. The City of Brentwood staff has been extensively trained to install, operate, maintain, program, and troubleshoot Econolite Encore and Vision video detection system units. These products reduce the time required to maintain the system overall and help keep the system operational during heavy traffic times to ensure maximum capacity of this synchronized system. By utilizing this equipment as the standard for the City, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repairs for the future overall.

- 4) **Battery Backup System Units:** The City of Brentwood is requesting that Econolite battery backup system units be used in all signalization projects including traffic surveillance cabinets within the City over the next three years where Federal and/or State funding are used. The following are justification items for this request:

The City of Brentwood has an inventory of existing equipment is comprised primarily of Econolite battery backup system units which is summarized as follows:

- 42 Econolite DBL1400MX battery backup system units
- 7 Clary battery backup system units

The Econolite battery backup system unit is required to provide full synchronization including extended function and capabilities. The City of Brentwood staff has been extensively trained to install, operate, maintain, program, and troubleshoot Econolite battery backup system units. These products reduce the time required to maintain the system overall and help keep the system operational during heavy traffic times to ensure maximum capacity of this synchronized system. By utilizing this equipment as the standard for the City, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repairs for the future overall.

I, Brad Freeze, Director of the Traffic Operations Division of the Tennessee Department of Transportation, do hereby certify that in accordance with the requirements of 23 CFR 635.411(a) (2) that the patented or proprietary items listed above are essential for the synchronization of existing facilities.

  
Assistant Chief Engineer of Operations

  
Date



## *City of Brentwood*

### Public Works Department

1750 Gen. George Patton Drive • Brentwood • Tennessee • 37027  
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January 22, 2018

Mr. Steve Bryan, P.E.  
Traffic Operations Division  
Tennessee Department of Transportation  
James K. Polk Bldg., 12<sup>th</sup> Floor  
505 Deadrick Street  
Nashville, TN 37243-0348

**Subject: City of Brentwood**  
**Signalization Project Components with Federal/State Funds**  
**Brentwood, Tennessee**  
**The City of Brentwood maintains 50 intersections.**

Dear Mr. Bryan,

The City of Brentwood is requesting certification to specify the following components be used, on projects involving signalization control and maintenance over the next 3-years using Federal or State funds.

- Reno Malfunction Management Unit (MMU) – 50 out of 50 intersections
- Econoline Encore and Vision Video Detection System Units – 21 out of 50 intersections
- Econolite Controller Units – 50 out of 50 intersections
- Econolite Battery Backup System Units – 49 out of 50 intersections

Our inventory of existing equipment is comprised primarily of the above listed products, and as noted below, you will see that our current signal system is composed of the following:


- 50 Reno 1600GE Malfunction Management Units (MMU)
- 21 Econolite Encore and Vision Video Detection System Units
- 8 Econolite Cobalt Controller Units
- 42 Econolite ASC 3 Controller Unit
- 42 Econolite Battery Backup System DBL1400MX
- 7 Clary Battery Backup System Units

The above products are required to provide full synchronization and extended capabilities. The City of Brentwood staff has been extensively trained to install, operate, maintain, program, and troubleshoot the Econolite controllers, video detection systems, battery backup systems, and the Reno MMU. These products reduce the time required to maintain the system overall and help keep the system operational during heavy traffic times to ensure maximum capacity of this synchronized system. By utilizing the Econolite equipment as the standard for the City, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repairs for the future overall.

Thank you for considering these equipment requests to better serve the public with increased safety and efficiency through normal operations and maintenance activities.

If you have any questions, feel free to contact me at 615-566-1588 or [martin.yates@brentwoodtn.gov](mailto:martin.yates@brentwoodtn.gov).

Martin Yates



Traffic Operations Coordinator

City of Brentwood, Public Works Department

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